# WOODY ORNAMENTAL AND SHELTER PLANTS FOR THE NORTH CENTRAL REGION 1956-1960

Five Year Reports on Regional Plantings\*

Ligustrum vulgare L. (P.I. 26767)

Common or European Privet

Frank N. Meyer, U.S.D.A. plant explorer, collected the seed of this privet on a dry, rocky mountainside near Sebastopol, Crimea. It was assigned P.I. No. 26767 on January 11, 1910. Plants of this introduction were sent to the North Platte, Nebraska Sub-Station in 1915. In 1937 McComb reported that they had proven far hardier than any other privet tested at North Platte. In 1956, L. R. Sjulin, Inter-State Nurseries, Hamburg, Iowa, provided 218 plants for regional planting at 27 sites.

# Description of the European Privet

A deciduous or half-evergreen large shrub to 15 feet which often retains its leaves long into the fall. Branches slender, spreading, branchlets minutely pubescent or smooth.

Leaves: Simple, opposite, entire, medium green, 1 1/4-2 3/8 inches, oblong ovate to lanceolate obtuse or acute, smooth petiole 1/8-1/4 inch.

Flowers: Perfect, white, small pediceled in terminal panicles 1 1/4-2 1/2 inches long, calyx bell-shaped, 4-toothed, corolla salver-shaped, a tube and 4 spreading lobes, stamens, 2 anthers longer than corolla tube, style cylindric, shorter than stamens.

Fruit: A 1-4 seeded berry-like black drupe sub-globose or ovoid 1/4-3/8 inch long.

# Outstanding Qualities

- This particular introduction of the European privet possesses tolerance to drought and cold.
- 2. It is easily propagated.
- The plant is a vigorous grower easily adapted for use as a hedging plant.

## Regional Trial Performance Data

### Location of Plantings

The location of the 27 plantings made in 1956 is shown in Figure 1.

#### Survival

The plantings at Fargo, North Dakota; Brookings, South Dakota; Madison, Wisconsin; Rose Lake, Michigan; North Platte, Nebraska; and Ames, Iowa (W) survived without loss the initial five-year period covered in this report. The number of plantings arranged by five-year survival percentages is given in Figure 2.

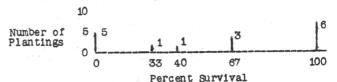


Figure 2. The number of plantings of <u>Ligustrum</u>
<u>vulgare</u>, P.I. 26767, according to fiveyear survival percentages.

Initial Losses: The plantings of P.I. 26767 (European privet) at Ames, Iowa and Highmore, South Dakota each had two plants which failed to survive the initial growing season. One plant at Crookston, Minnesota failed to grow after planting. Three plants at Rose Lake, Michigan failed to live through the first summer. Replants at Ames, Iowa and Highmore, South Dakota, although successfully established, ultimately lost 80 per cent and 50 per cent of the replants, respectively.

Delayed Losses: Plantings at the Twin Cities and the Waseca, Minnesota sites were moved during 1958, an unusually dry year. This resulted in the loss of all plants at the former site and one plant at Waseca. Seven plants died at Rosemount, Minnesota, in the four and one-half years after the initial growing season.

Two plants failed to survive the first winter and two more died in the period between the second and fifth winters at Ames, Iowa. At Highmore, south Dakota one plant died in the last three-year period. At Duluth, Minnesota all three plants died from winter injury in 1960

#### Growth Evaluation

Average fifth year growth (inches): Shoot growth reports for P.I. 26767 are not as impressive as those of P.I. 107630. Least growth, two inches, was observed at Rose Lake, Michigan and Ames, Iowa (E). The most shoot growth, 19 inches, was reported for plants not considered hardy at Highmore, South Dakota. Other data on this subject follow (Table 1).

Table 1. Average fifth year shoot growth of <u>Ligus-trum vulgare</u> (P.I. 26767) for several planting sites.

Location	Growth (in.)	Location	Growth (in.)
Ames, Iowa (E)	2	Fargo. N. Dak.	10
Rose Lake, Mich.	. 2	Crookston, Minn.	12
Ames, Iowa (W)	7	North Platte. Nebr.	12
Waseca, Minn.	7	Brookings, S. Dak.	18
Morris, Minn.	8	Highmore, S. Dak. *	19

\* Plants not satisfactory here.

Average plant size after five years (height-spread in feet): The Highmore, South Dakota plants considered not to be hardy at this location were 2.5 x 2.5 feet after five years. Plants on the east exposure at Ames, Iowa were 2 x 2 feet while at Crookston, Minnesota 6 x 6 feet was average for this introduction which had suffered considerable initial winter injury, but more recently had not been injured. The largest size plants in five years were 8 x 10 feet at North Platte, Nebraska. These and other five-year height-spread reports are shown in Figure 1.

<sup>\*</sup>A regional testing program organized as a work plan under the North Central Regional Plant Introduction state-federal cooperative project NC-7 Title: The Introduction, Multiplication, Preservation and Testing of New and Useful Plants of Potential Value for Agricultural and Industrial Uses. Sub-Title of work plan: Woody Ornamental and Shelter Plants for the North Central Region. This report covers plants grown in: Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota and Wisconsin.

#### Cultural Problems

It would appear that this shrub may be expected to perform reasonably well in areas of moderate fertility and moisture, which are free of high soil alkali.

# Planting Recommendations by State

This shrub is primarily for trial in parts of the region where soil moisture is not a limiting factor. (Note contrasting performance at Highmore and Brookings, South Dakota). See Figure 1 for suggested northern limit of future trial plantings.

# Appropriate Uses

Because this shrub is easily propagated from cuttings and responds well to clipping, producing dense growth and numerous relatively small leaves, it is satisfactory for use as a hedge plant. It also may be employed in the shrub border for such desirable qualities as its fragrant flowers which attract bees, and for its handsome black fruits which serve as bird food during the winter.

# Further Testing of P.I. 26767

The use of P.I. 26767, <u>Ligustrum vulgare</u>, in the regional trial plantings has not been as satisfactory as the accession from Yugoslavia (P.I. 107630). However, regional trial experience with these two accessions of <u>Ligustrum vulgare</u> suggests that they may be somewhat hardier than <u>Ligustrum amurense</u>, Amur River North. It is recommended that workers in areas where <u>L. amurense</u> is not satisfactory should continue testing <u>Ligustrum vulgare</u> from different sources for local adaptation.

#### Sources of this Introduction

This plant was obtained from the North Platte Experiment Station in west central Nebraska where it has been successfully grown since 1915.

#### References

The numbers listed below refer to pertinent references among those included under literature.

2, 3, 4, 13, 14, 21, 22, 24, 25, 32, 35, 39, 53.

